For Research Use Only

CHD8 Recombinant antibody

Catalog Number:86032-1-RR



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number:

86032-1-RR NM 001170629 Protein A purification

GeneID (NCBI): CloneNo.: 100ul , Concentration: 1000 $\mu g/ml$ by 57680 250612C4

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Q9HCK8 WB: 1:5000-1:50000 Rabbit IF/ICC: 1:500-1:2000 Full Name:

Isotype chromodomain helicase DNA binding

IgG protein 8

Immunogen Catalog Number: Calculated MW:

290KD AG31425

> Observed MW: 290 kDa

Applications

Tested Applications: Positive Controls:

WB, IF/ICC, ELISA WB: HeLa cells, Jurkat cells, mouse brain tissue, HEK-Species Specificity:

293 cells, MCF-7 cells, rat brain tissue

human, mouse, rat IF/ICC: HeLa cells,

Background Information

Chromodomain helicase domain 8 (CHD8) is one of the most frequently mutated and most penetrant genes in the autism spectrum disorder (ASD). CHD8 is located on 14q11.2. It is part of the SNF2H-like ATP-dependent chromatin remodeling enzymes family referred to as CHD (chromodomain helicase DNA binding). CHD8 has two isoforms: CHD8L, a full-length protein of 280 kDa; and CHD8S (Duplin), a 110 kDa protein of the NH2-terminal chromodomain region resulting from alternative splicing (PMID:19151705). CHD8 is essential for development, as homozygote mutant mice die at an embryonic stage. CHD8 is expressed in the mouse at the embryonic stage (E12.5) in different levels in wide regions of the brain (neocortex, forebrain, ventricular, subventricular and mantle zones, rhombic lip (RL), and the isthmus of the cerebellum, as well as in lower RL and floor plate region of the hindbrain, midbrain, diencephalon, hypothalamus, pituitary gland, craniofacial region, and tongue and olfactory epithelium). In the postnatal mouse brain (P20), CHD8 is expressed in the cerebellum, neocortex, hippocampus, hypothalamus, and olfactory bulb (PMID:30277262). Peak expression levels were observed at E18-P7, then gradually decreased to adulthood. Highest expression was found in neurons, and lower levels in astrocyte and astroglia (PMID:30574290). In the mouse, CHD8 is expressed higher in brain compared to other tissues and in the embryo, compared to adult.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

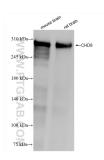
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

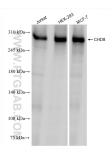
Selected Validation Data



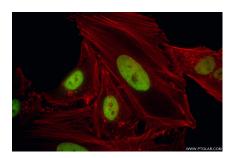
HeLa cells were subjected to SDS PAGE followed by western blot with 86032-1-RR (CHD8 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours



mouse brain tissue were subjected to SDS PAGE followed by western blot with 86032-1-RR (CHD8 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 86032-1-RR (CHD8 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed Hela cells using CHD8 antibody (86032-1-RR, Clone: 250612C4) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).